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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,469	11/16/2000	JAWED ASRAR	11899.0189.DVUS00	5618
23579	7590	02/06/2004	EXAMINER	
PATREA L. PABST HOLLAND & KNIGHT LLP SUITE 2000, ONE ATLANTIC CENTER 1201 WEST PEACHTREE STREET, N.E. ATLANTA, GA 30309-3400			YOON, TAE H	
			ART UNIT	PAPER NUMBER
			1714	
DATE MAILED: 02/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/714,469

Applicant(s)

ASRAR ET AL.

Examiner

Tae H Yoon

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 09 January 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 2 months from the ~~mailing date of the final rejection~~ *Notice of Appeal*.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
(a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ they raise the issue of new matter (see Note below);
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 50-76

Claim(s) withdrawn from consideration: _____

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

Tae H Yoon
Tae H Yoon
Primary Examiner
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ATTACHMENT TO ADVISORY ACTION

The amended claims reciting “--- composition comprising a blend comprising P3HB4HB and a nucleant --” raise new issues that would require at least further consideration and even further search as reasons given below and thus the entry is denied. A partial entry is not permitted and thus the amended claims 65 and 68 (69 currently) with respect to 35 USC 112, 2nd PP will not be entered. However, renumbering of claims 50-76 is accepted.

Applicant has asserted that the recited P3HB4HB blend has a support, but the examiner disagrees since the recited “Toughness of P3HB-4HB blend” in example 24 is a blend of P3HB-4HB and a nucleant (boron nitride), not a blend of P3HB-4HB and other biodegradable polymer contrary to applicant's assertion. The teaching on page 7, lines 20-22 shows also a composition comprising or consisting of P3HB-4HB and a nucleant, not a blend of P3HB-4HB in combination with a nucleant. The specification shows a blend of PHA (not P3HB-4HB) and a second biodegradable polymer different from said first polymer, and one or more oligomeric ester as pointed out by applicant, however, said P3HB-4HB is neither taught as first biodegradable polymer nor second biodegradable polymer. Applicant further asserts that the prior art do not teach a polymer blend, and thus, applicant's position is that the recited “blend” meant a blend of P3HB-4HB, a second biodegradable polymer different from said first polymer and a nucleant which requires further search.

Applicant also asserts that the recited elongation is not taught by the prior art.

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However, it is well known in the art that PHAs such as PHB and PHBV do not have a high elongation rate (only 4 to 42%) and that P4HB inherently has a high elongation rate (and low T_g) (about 1000% and below - 40 °C, respectively) (see [0006] and tables 1 and 5 of the enclosed US 2002/0173558 A1). Thus, claims absent a particular amount of a second biodegradable polymer would be indefinite in view of applicant's assertion that the recited "blend" meant a blend of P3HB-4HB, a second biodegradable polymer different from said first polymer.

With respect to Nagaoka, applicant admits that Nagaoka teach boron nitride and the copolymer of 3HB and 4HB which is the claimed invention by the examiner's interpretation (not a polymer blend). Applicant failed to show any unexpected result of the claimed range of 4HB, and any showing of the specification is broader than the actual invention.

With respect to JP 6-336523 and JP 4-326932, these patents are cited to show the art well known copolymer of 3HB and 4HB, not a nucleant or a polymer blend.

With respect to JP 615878, this patent is cited to show various amounts of a nucleant (boron nitride), not the claimed range of 4HB or a polymer blend.

With respect to combination of prior art, Nagaoka teaches the use of biodegradable polyhydroxyalkanoates and thus the utilization of biodegradable copolymer taught by JP is a *prima facie* obviousness contrary to applicant's assertion.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Tae H Yoon
Primary Examiner
Art Unit 1714

THY/January 28, 2004